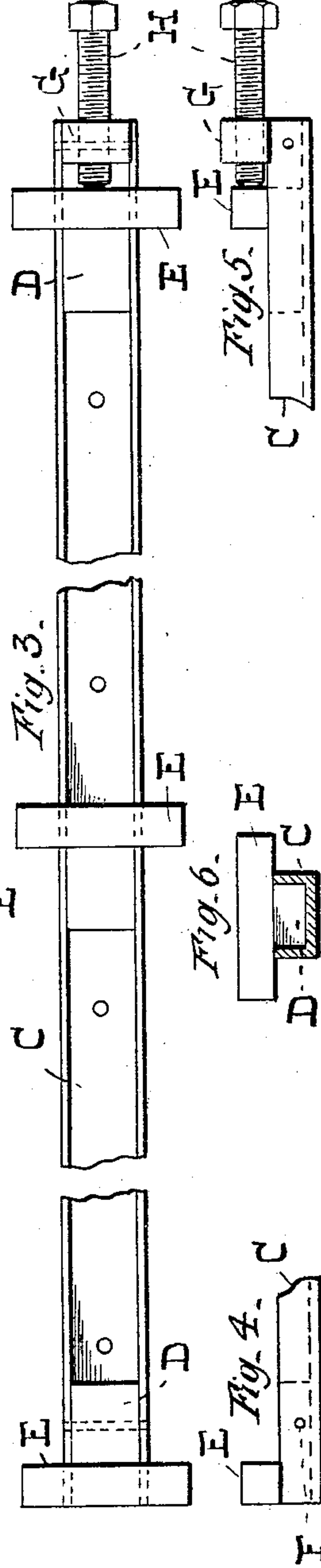
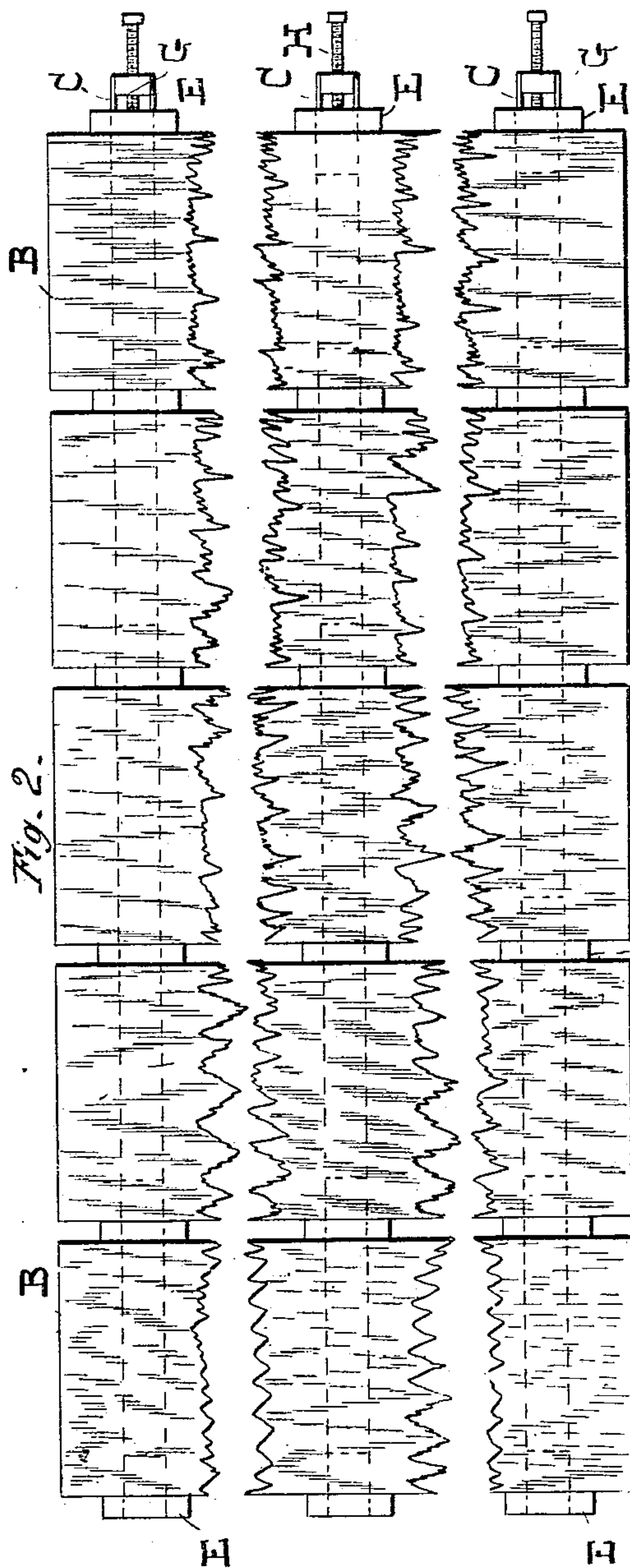
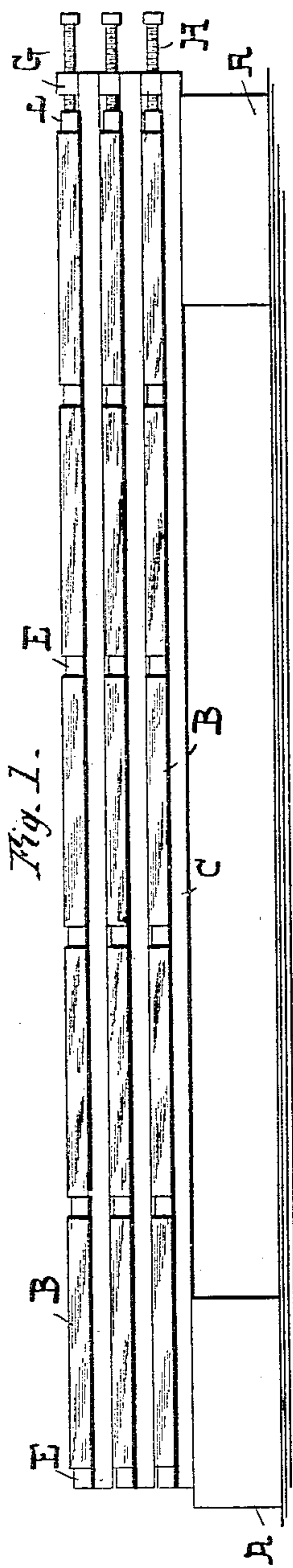


G. JOHNSON, JR.
STACKING OF BOARDS.
(Application filed Dec. 27, 1901.)

(No Model.)



Witnesses:

Oregon Timber Service
Estep & Co.

Inventor:

Greenleaf Johnson, Jr.,
by W. H. T. Howard,
att'y.

UNITED STATES PATENT OFFICE.

GREENLEAF JOHNSON, JR., OF BALTIMORE, MARYLAND.

STACKING OF BOARDS.

SPECIFICATION forming part of Letters Patent No. 704,260, dated July 8, 1902.

Application filed December 27, 1901. Serial No. 87,461. (No model.)

To all whom it may concern:

Be it known that I, GREENLEAF JOHNSON, Jr., of the city of Baltimore and State of Maryland, have invented certain Improvements in the Stacking of Boards to Facilitate their Drying and Prevent their Edgewise Warping, of which the following is a specification.

Lumber when placed in a kiln or stacked in a lumber-yard is in a comparatively damp condition, and the boards while drying are liable to warp edgewise, and when so warped a considerable loss of material is experienced in edging the dry boards or making them straight.

This invention consists in stacking boards in vertical separated layers and separating the adjoining boards of each layer to produce ventilating-spaces and in clamping each layer of separated boards edgewise to prevent the boards when drying from edgewise warping, as will hereinafter fully appear.

In the further description of the said invention which follows reference is made to the accompanying drawings, forming a part hereof, and in which—

Figure 1 is an exterior view of a stack of boards clamped in accordance with the present invention and looking toward their ends. Fig. 2 is a top view of Fig. 1 with portions of the boards cut away to reduce the height of the figure. Fig. 3 is a top view of one of the clamping devices. Figs. 4 and 5 are side views of the ends of the clamping device, and Fig. 6 an end view of Fig. 4.

Referring now to the drawings, A A are the sills, which form the foundation of the stacked lumber.

B B are the boards, indirectly supported by the sills A. Instead of the ordinary piling-strips which are placed between the layers of boards to support them and to retain them at a suitable distance apart, so as to admit of the free circulation of air through the stack, I employ devices which not only support the layers, but also serve to separate the boards and further clamp the separated boards of each layer edgewise together. These devices may be constructed in a variety of ways to accomplish the purpose in view. I have therefore shown what in my judgment is the best

construction, but do not limit myself to its use. These clamping devices, as shown, consist of bearing-bars C of the channel order, provided with blocks D, which lie therein and are provided with cross-pieces E, which extend above and across the upper edge of the bearing-bars. The block at one end of each bar C is secured in place, the means of fastening being a pin F, while the other blocks are adjustable in position and adapted to be moved longitudinally of the bar. At the other end of the bar is fastened a nut G, in which is adapted to turn a screw-bolt H, whereby the block adjacent to it may be set up.

In piling lumber to be dried in accordance with the present invention a series of bars C are laid on the sills A and arranged so that the ends and the intervening parts of the boards may be properly supported. In Fig. 2 the boards are shown as supported only at the ends and at the center.

The first board placed across the bearing-bars is pushed into contact with the stationary cross-pieces E and loose blocks set up to it, when another board is placed in position or against the said blocks. This arrangement of boards is carried out until as many boards are placed in position as the bars will admit of, when the last blocks are set up tightly against the last board by means of the screw-bolts H. Bearing-bars are then placed on the edgewise-clamped boards and another series of boards clamped, as described, and the operation continued until the stack is complete. During the drying operation the boards are thus held immovable, and at its conclusion when the boards are released they will be found to be straight and free from edgewise warp.

I claim as my invention—

A stack of boards consisting of the combination of boards laid flatwise in horizontal layers with means to separate the said layers, devices to separate the adjoining boards of each layer, and mechanism to clamp the said adjoining boards edgewise, substantially as, and for the purpose specified.

GREENLEAF JOHNSON, JR.

Witnesses:

OREGON MILTON DENNIS,
ESTEP T. GOTT.